A 5

A Dissertation on Typhus Fever

by

John C Boyd

of

Hopkinsville Kentucky

I prefer being examined before the Faculty

John C Boyd

Market Street No 184.

admitted March 30th 1820

Typhus Fever

The existence of this disease in the United States, as an Epidemic, has long been known, having desolated the fairest portions of its wide extended territories. From the varied forms in which it has appeared in different parts of the Country, different appellations have been confered on it; the most common of which are Pneumonia Typhoides &c. That the disease has assumed Pneumonic symptoms, which gave rise to this particular name, cannot be denied, particularly in the North, where diseases of the Pulmonary Organs exist, as a common occurrence; but it is equally certain, that the appellation is misapplied, as the disease exists in that portion of the Country, in which I reside. If the character of a few of the most prominent symptoms, should entitle a disease to a particular name, it should certainly be designated by different appellations, according as it appeared in the summer, or winter, evidently partaking more of the Bilious character, in the former months, than in those

of any other. As it appears in the winter, it certainly has many, if not all the symptoms of genuine Typhus; and should be designated by that appellation. The Pulmonary Organs are seldom affected, and when they are, it proves infinitely the mildest form in which the disease appears. I have but little to say, concerning the contagious character of this disease, as it exists in our Country; not being in possession of any facts of a positive nature, which would justify me either in affirming, or denying the existence of such. The circumstance of its attacking whole Neighbourhoods, as it were simultaneously, as also its affecting persons, who had not had any communication with the sick, are facts, which would lead us to conclude that, it owed its origin to an atmospherical distemperature. That the disease, in its last stages, in crouded, confined, and illy ventilated rooms, where cleanliness has not been observed, is rendered contagious, I am willing to admit; and such

perhaps is the way, in which contagion first originated; but these are circumstances which we do not often see, and which would, in my opinion enable the extreme vessels, in this, as in almost all other Typhoid Stages of fever, to secrete, and diminate a poison, capable of reproducing itself in persons, whose systems have been rendered susceptible of its impression, when brought within the confined Sphere of its action. Whatever has a tendency to depress or enervate the corporeal, or mental powers, may give rise to the disease; the most frequent of which, are fasting, or watching, excessive evacuations, anxiety, want of nutritious food, confined air; but above all marsh miasmata, and cold, conjoined with moisture, to which the Negroes and poorer Class of Whites are particularly exposed. Although as I before said, the Negroes and poorer Class of society, are more subject to its attacks, than persons in better circumstances Yet there are none, entirely exempt from its

ravages, as we often see it in the wealthy, and voluptu-
ous. Its greater prevalence, and more frequent mortal-
ity, in Neighbourhoods contiguous to sources of marsh
exhalations, than others, in different situations,
pointed out an obvious source of its origin. To give
a discription, of all the various forms, and symptoms,
under which it appeared, would require more time,
and labour, than I can at present bestow: and shall
therefore, be compelled to confine myself, in the
description of the disease, to its most common
forms. An attack of the disease is characterised
by some lassitude, wariness, indisposition to
motion, nausea, some degree of head-ache,
frequent chills, succeeded by flushes of heat, pulse
somewhat accelerated, but small and ~~rarely~~ com-
pressible, bowels constipated, tongue white and
furred, sometimes yellow, some uneasiness in the
limbs and back - It is no uncommon occurrence
for the patient to continue in this situation
for some two or three days, when the symptoms

will suffer a remarkable exacerbation; the patient be attached with violent head ache, nausea, vomiting of dark bilious matter, sometimes clear bile, to a considerable amount; rigors, succeeded by intense heat over the whole body, great gastric distress; a general uneasiness, pulse very variable, sometimes full and quick, but ~~xxxxxx~~ compressible; at other times it will be quick, weak, and irregular, often a great degree of debility, at the onset. In other cases the patient is able to stand, or even walk, but still he complains of weariness, and debility; the tongue which before was moist, becomes dry and parched, and if desired to put it out, it becomes tremulous. As the disease advances, the debility of the muscles of voluntary motion, becomes more considerable, the patient is incapable of getting up, often lies on his back; complains much of his head, confusion of ideas, wandering of the imagination, sometimes delirium, though the patient is more frequently stupid than violent;

pulse frequent, weak and irregular. He often continues
sullen, and mutters to himself, as if brooding
over something that distresses him, or moans
continually, dozes frequently, and speaks inco-
herently; pulse increases in frequency, and
becomes weaker. At a more advanced stage,
respiration becomes hurried, and laborious, the
tongue becomes covered with a thick, brown
tenacious fur, the mouth is dry, and clam-
my, and similar incrustations take place ar-
ound the teeth, and lips. In a more advanced
stage, the tongue becomes black, and deep
chaps form on its surface: a corresponding
change takes place in the mucous, bemearing
the lips and teeth; the breath becomes hot and
very offensive - the skin is remarkably hot dry
and parched, giving the sensation described
by some Authors, as of a biting kind: the
patient lies on his back, with his eyes half-
open; the extremities become cold; the pulse

becomes so weak, and quick, as scarcely to be counted, or stops entirely: picking the bed-clothes, stupor, coma, Subsultus tendinum, involuntary evacuations, supervene, and Death closes the tragic scene!
It not unfrequently happens, that an ichorous Diarrhoea comes on towards the close of the disease, (particularly if the bowels have been suffered to remain costive) and carries off the patient. Hemorrhage occurring in the advanced stages, is unfavourable particularly from the bowels. I do not recollect ever to have seen a patient recover, who discharged a considerable quantity of dark coloured fluids, somewhat resembling coffee grounds, which almost always attends a fatal termination of the disease. The collection of white matter, at the inner canthus of the eye, was unfavourable. To see a patient lying with this eyes half open, exposing the white of the eye-ball, was unfavourable. The vomiting of worms, was one of the most deadly symptoms. A favourable termination

was denoted by the symptoms becoming more mild, with a general Diaphoresis, a considerable discharge of urine, with sediment. To hear a patient complain of being worse, is a favourable sign. The swelling of the glands about the ear, has long been known as a favourable symptom. The deafness so often mentioned by Authors, is by no means an unfavourable symptom. The disease usually continues three or four weeks; but often runs on to two months, and the patient dies, from mere debility. It is usual about the tenth day, for the disease to show some symptoms of a remission, frequently attended with a ptyalism. These are fallacious appearances, as they seldom or never terminate the disease. From an attentive consideration of all the symptoms, mentioned as characterising an attack of Typhus, we should be led to locate this disease, in the Stomach. Owing to the prejudices of the age, we have never made dissections with a view

to determine the precise seat of its attack; and can only draw our deductions from an attentive consideration of its most prominent symptoms. — It has been the custom, immemorially, to prescribe Emetics, at the commencement of this disease. Guided, not less by the pathological views, which we have taken of the nature of this disease, than by a wish to relieve the great Gastric distress, heat & dryness of the surface, its invariable attendants; we, have generally, when called, at the onset, commenced the treatment, with the exhibition of an Emetic. From the very prompt, and immediate relief which they sometimes afforded, they were brought into pretty general use, and continued to be employed with very variable success, proving beneficial, or injurious, as they were used, earlier or later, in the progress of the disease; until the sudden, and fatal termination, of three or four cases, from this use, threw them for a while, into an almost total neglect. Such was the sudden &

fatal termination of one case, in which an Emetic had been used; that it gave rise to a report, that Arsenic had been given, in place of Antimony; and the Young Man, who prescribed it, had well nigh lost his reputation, from this circumstance. It was my misfortune, next to witness the pernicious effects of this remedy, in the case of one of my Negroes, to whom six grains of Tartar Emetic had been exhibited, in divided doses, by my Preceptor. It was on the second day from the time the patient was first heard to complain, who was a Girl of Sixteen; with all the marks of a vigorous constitution, and the disease apparently mild, she was attached with frequent retchings, nausea, and occasional vomiting, with a pulse soft, quick and compressible, though not very weak - some giddiness of the head, but no delirium, or confusion of ideas. Under these circumstances, the Emetic Tartar was exhibited, as before mentioned, in divided doses untill full vomiting was induced. The patient

discharged a considerable quantity of dark, bilious matter, which became more of the colour of common bile, at the close. As well as we can recollect, it vomited her, four or five times; after which, she had a discharge by stool, which carried off a considerable quantity of feculent matter. She was now put to bed, and was given some Gruel. The pulse, during the operation of the Emetic, was considerably increased, in strength, and frequency, which, it retained but a few moments after the patient was put to bed - Only a slight degree of moisture was observable, on the face, and neck. Having retired from the house, in which the patient lay, we were hastily called back, to see the Girl - we did so - and to our great surprise, found the patient almost entirely without a pulse, at the wrist, which very soon afterwards stopped entirely: breathing slowly, and laboriously, and the extremities growing cold. In this situation, a considerable quantity of wine was exhibited; but without the

desired effect – We now applied hot bricks to the lower extremities, and gave considerable quantities of Rum, and Brandy undiluted with one hundred drops of Laudanum, rubbing, and smacking her hands, at the same time – by these means, we succeeded in producing a few pulsations at the wrist; but to our great regret, we found that the advantage we had gained, was only evanescent; and although, the most active stimulants were exhibited, we had the mortification, to see our patient sink into the arms of Death. A knowledge of this, and a few others of a similar nature, has so far convinced some Practitioners of their entire inutility, that I have heard some of them remark, that they would as soon think of administering to a patient, in Typhus forty grains of Asenic, as a common dose of Tartar Emetic. From all I have seen, in the use of this remedy, in the disease both before it fell into disuse, and in some few cases, in which I have exhibited it,

since; I am led to conclude, that if exhibited on the first day of the attack, it will often be found to arrest its progress, almost immediately, or if it does not prove so completely serviceable, will considerably mitigate the most distressing symptoms, by discharging from the stomach, a quantity of offensive matter, which could not do otherwise than aggravate the disease. To overcome the constipated state of the Bowels, and thereby to relieve them of their accumulated load of feculent matter; we should next resort, to Cathartics; and that the end may be fully attained, not less than twenty five grains, of Calomel should be given, to an adult. There is something in the action of Cathartics, in this case, analagous to that of a Sudorific; as I have frequently seen the action of a Cathartic followed by a mitigation of the great heat of the surface; and even a gentle perspiration in some cases, has followed. It has of late years been recommended by some, to trust the cure of Typhus almost entirely to the action of Cathartics, which they say

so far from debilitating the patient, have quite an oppos
ite effect. That such was really the result of their action,
in the hands of those who made these reports, cannot
be denied. But notwithstanding the high authority
from which they emanated, I must question their
entire applicability, to every case; or even a majority
of those cases, which occurred among us. In some
cases, (which I confess were but few) I have seen them
dissipate the low delirium, tumors flaccitatia & relax
the skin, by removing a large quantity of feculent
matter from the intestines. The tongue which had
before been dry, and furred, became more moist,
and the pulse rendered less frequent. But such
beneficial effects can only be expected in the first,
and second stages of the disease, where the bowels
had long remained costive, (or in the last stage) under
similar circumstances. I have seen on the contrary,
many patients hurried off, by their frequent use —
While I disclaim against the daily use of Cathartics,
in this disease; let me not be understood to mean

that I do not, under a proper limitation, think them serviceable; on the contrary, I consider an evacuation from the bowels, one in forty eight hours, during the whole course of the disease, obtained by a small dose of Calomel, given so, as to produce only one evacuation in that time, (after the bowels have once been thoroughly opened) of the first importance. We are possessed of no physical agent, as far as my limited experience has taught me (not excepting even the use of blood-letting in acute inflammation) by which the functions of the animal economy are controlled, with so much certainty, safety, and promptitude, as by the application of cold water to the skin, under the augmented heat of Typhus and of some other fevers —

This expedient combines in itself almost all the medicinal properties, which are indicated in this stage of the disease; and which we, should scarcely a priori expect it to possess; for it is not only the most effectual febrifuge; but is in fact, the only sudorific, and Anodyne, which will not disappoint the

expectations of the Practitioner under such circumstances. I have had the satisfaction, in numerous instances, of witnessing the immediate improvement of the symptoms, and the rapid change, in the countenance of the patient, produced by sponging the body, with cold water. Invariably, in the course of a few minutes (if it has not been misapplied) the pulse has been diminished in frequency; the thirst has abated, the tongue has become more moist; and in some cases a gentle perspiration has succeeded; or if this does not happen, the skin is rendered soft, and cool, followed by a refreshing sleep.

The morbid heat, it is true, is liable to return, and with it the distressing symptoms; but a repetition of the remedy, is followed by ~~a repetition~~ the same beneficial effects, as at first; and I would here merely observe, that although it may be used with more freedom, in the first, and second stages of the disease; Yet it is equally proper, in the last, only requiring a little more caution in its use. ——

The rules, by which we are to be guided in the use of this remedy, have been detailed at some length, by Currie of Liverpool; and I shall therefore only mention two of the most important,

1st Never to use it, unless the heat be steadily above the natural standard, or when there is any degree of chilliness - & present

2nd Be certain that the patient's skin is not moist. Whether this remedy proves serviceable, by exciting an impression on the surface, which being communicated to the system by sympathy, has a tendency to subvert the morbid associations, in which the disease is said to consist; or merely by abstracting the supernabundant heat; thereby calming irritation, and inducing perspiration, is not my object, at present, to determine: Nor do I know, that we should gain much, if we were in possession of the fact. —

Should we not have succeeded, in arresting the progress of the disease, by the use of Emetics, Cathartics and cold water; we should next resort to Diaphoretics.

In the selection of the articles of this class, we should recollect, that there is, often a considerable degree of excitement yet remaining, and that we should in this, as in all other cases, be careful to adapt the power of the remedy, to the existing state of the system. The milder ones will often be found, to answer best; and for this purpose, I know of none, superior to the Spts Minda, the Eupatorium Perfoliata, the Saline draught, or the Dulcefied Spt of Nitre alone, or combined with Laudanum, and Antimonial wine, taken to the extent of a dram, or more, every hour, or two, aided by a vapour bath, or some mild, warm, beverage will be often found effectual. By using Calomel, in the small, and divided doses, which we have recommended to keep the bowels open, we often produce a ptyalism. of all effects, the most to be wished for - In no case, does this remedy exhibit more beneficial results, than in the one under consideration, at whatever time it may be induced. To ensure more completely,

its effects, it should be accompanied by frictions; but after all our exertions, we frequently fail, in accomplishing the desired end. Although, we do not succeed in inducing Ptyalism, we fulfil other indications, of no minor importance.

There is constantly pouring into the intestines, a quantity of fluid, secreted by the small vessels, which open on their surface: This, if suffered to remain, would become highly acrid, and irritating; and could not fail, to produce an aggravation of the disease, by adding to the general irritation, increasing the thirst, and dryness of the mouth, and the intense heat of the surface. A few grains of Calomel, under such circumstances, will produce effects, the most beneficial, [illegible] ℞ 4to

I know of no remedy, which is more serviceable, in correcting the morbid secretions, from the stomach, and alimentary canal, than the one, under consideration. When water, and other drinks fail to allay thirst; a few grains of this medicine

administered every three, or four hours, will often effectually relieve this distressing sensation. I can with perfect confidence say, that I never have seen a patient die, after salivation came on, provided a small quantity of stimulus was given to support the system, on the decline of the mercurial irritation. The Colliquative Diarrhoea, formerly spoken of, is less liable to come on, after such a course. To the state of increased excitement, whatever may have been the mode of treatment, if the fever continues above a few days, always succeeds that of debility, and a corresponding change, in our treatment, now becomes obviously necessary. The only indication, to be fulfilled now, is to increase, or support the power of the Sanguiferous System, which is, to be done 1st by an attention to diet, as far as the state of the digestive organs will admit of it; & 2ndly by the use of strengthening medicines. — 1st In Typhus, the power of the digestive Organs

although greatly diminished, is not wholly suspended, and some attention to diet, is necessary. It is of qual consequence, not to permit the stomach to remain long empty. Sir John Pringle observes "Perhaps there is no rule, more necessary, than never to let the patient, when low, remain long without taking something cordial, or nourishing, as I have seen numbers, in a promising condition, sunk past recovery, by being allowed to pass a whole night without any support, about the time of the crisis. The food should be mild, nourishing and easy of digestion, to be frequently given, during the day, and night; the patient should be aroused to take it, as he will never ask for it.

Tapioca, Arrowroot or Sago, should be had recourse to; or what will be found very convenient, in in Country practice, and not less beneficial, is, a kind of Soup, made by adding the meal of Indian Corn, to a quantity of boiling water, to which, should be added, wine, nutmeg, & sugar.

This is a home-made prescription; but I am confident, it will not be found less beneficial. The best drink is wine whey.

2nd We come now to that part of the treatment of this disease, in which all Practitioners coincide as to the great indication to be fulfilled. Yet few of them agree, as to the means to be employed. While all seem agreed with respect to the propriety of using the medicines, strictly termed Tonics, in Typhus; they differ widely, respecting those, to which the name of stimulant has been more exclusively applied. The chief of these, are Opium, wine and Vol Alkal. By many Practitioners, the latter is prefered, as a stimulant; but much benefit may be derived, from this medicine, by combining it with wine whey it may be given in the following form Viz Carb. Am. Sach. Album ʒs. Pulv. Gum Arab. ʒii Aqua Font. ʒij dose Pro re nata.

While some disclaim, altogether against the employment of Opium, for the purpose of increasing

the action of the heart and arteries; and employ it only to allay morbid vigilance, and delirium; there are not wanting others, who trust the cure, almost alone, to its use. Some have recommended it for this purpose, in very large doses, and there is reason to believe that it would have been more extensively used with this view; were it not, that we have in wine, means of producing nearly the same effects, in many respects less objectionable. But many equally object to increasing the action of the heart, and blood vessels, in the second stage of fever, by wine. To Brown perhaps who inculcated its use, both by precept and example, are we indebted more than any other, for its general use. Being more nutritive & less transitory in its effects than Opium, I should not hesitate to give the decided preference to wine, except in cases of extreme exhaustion; where the stimulus of the wine would not be sufficiently powerful to ward off the impending danger. I should seldom resort to it, for the purpose of

increasing the general circulation; but only employ it, to allay morbid vigilance, remove low delirium, and suppress Diarrhoea. These are indications often to be fulfilled; and here Opium displays a decided superiority over other remedies of this class. It may here be proper, to remark, that delirium may arise, in two different stages of this disease. That which occurs in the latter stages, is to be relieved by applying hot Bricks to the feet, which are almost always cold, in such cases; and by the liberal use of the remedy just mentioned, viz. Opium. When it arises in the first stage of the fever, it is effectually relieved by Cupping Leeching, cold water, and a blister applied all over the head. Blisters in this stage of the disease, are productive of the most beneficial effects; and should in every case be applied to the extremities. But to return to the use of Stimulants; there is no little difference of opinion, as to the quantity to be administered, in this stage

of the disease. When we see a patient labouring under symtoms of extreme debility; and find these symptoms, almost uniformly relieved by a considerable quantity of wine; it is difficult at first view, to persuade ourselves that the wine is pernicious; but an attentive observer will look beyond its immediate effects, and will then readily see a sufficient reason to doubt the safety of this practice. He will find that the temporary excitement he thus procures is succeeded by a greater degree of debility, than that, which the stimulus had removed; and if he persevers in this plan, that, in a large proportion of cases, the pulse upon the whole will gradually become more frequent, and feeble; till it ceases altogether. Besides the apparent good effect of wine, for a short time after its exhibition, Physicians have been led to an excessive use of it, in Typhus, by another observation; the comparatively small effect it produces. But it is to be recollected that wine in Typhus

only produces less excitement than in health, in proportion as the remaining excitability is less; and hence, our exertions should not be, to produce a degree of excitement, equal to that of health; but only to prevent the system from sinking lower; and in doing this, we should not consider the quantity, but the effect produced: What in one case, would be sufficient to accomplish this purpose, would in other instances, be too great; or perhaps in another, produce no effect. I have in some cases, given as much as three pints in the day, without producing more excitement, than I have in other cases by one third of the quantity.

When the pulse is soft and frequent; when the patient complains of weakness, and feels a desire for something to support his strength; although these symptoms do not go so far as to indicate danger, the exhibition of wine is proper.

Where the skin is hot, and dry, and parched, great thirst, and restlessness, anxiety, and affrequent pulse; if we administer the wine, we shall find, that the hot skin, restlessness, anxiety &c, will be considerably increased; to the manifest injury of the patient. But by taking the precaution, to reduce the temp- erature of the skin, by sponging with cold water, we shall find very opposite results; and which should always be attended to, before administer- ing the wine, or any other stimulus.

Here we may be permitted to remark, that two of the greatest evils, with which we have to cont end, in the treatment of this disease, in a County practice, are, our not being able, to re- main with the patient, to accommodate the quantity of stimulus, to the exigencies of the case; and the almost impossibility of getting the attendants to administer the necessary quantity of wine, during your absence. Some of them will shudder with horror, if you order a quart or three

pints of wine a day: when you have left your patient with the idea, that he is taking the quantity, which you directed, he does not perhaps get more than half a pint in that time; and on returning, you have the mortification to find your patient, inevitably sunk beyond the power of medicine— he dies— and his death is attributed to your want of skill.

In other cases perhaps, when you return, you find that the quantity of stimulus was too great which had been ordered; and your patient manifestly injured. It is useless to talk to the people, about the state of the system; of which, they know as much, as they do of Hebrew— I am only surprised, that it does not prove more frequently mortal; as we do not see our patients, in some cases, more than one, in forty eight hours. Good nursing, and a generous diet, will do almost as much good, under such circumstances, as the prescription of the Physician. But where we can be with the

patient night and day, to see all the variations of the disease, and prescribe accordingly; we can in almost every case, when called, at the commencement, save our patient. Where, from the inveteracy of the disease, the inefficacy of our remedies; or where we have not been called in time, we find our patient labouring under all the symptoms of approaching dissolution; ✱✱ such as low delir-ium subsultus tendinum, cold extremities, a quick and feeble pulse, involuntary evacuations &c; we have to resort to other, and more powerful Stim-ulants. The best under such circumstances, are, Brandy, or Rum undiluted; Alcohol, Laudanum or Ether may, in consequence of their more power-ful, and diffusible nature, be used in cases of great emergency with advantage: The action, which they produce, being sustained by those of a less transitory character; it will require less stimulus, to keep up a sufficient degree of action under such circumstances, than

it does to rouse the system from its lethargic state. We should be guided here, in the administration of stimulus, as we formerly mentioned; that is, to give as much, as will be sufficient to produce the requisite degree of excitement.

Under such circumstances, great benefit may be derived from the use of external applications. It has been said by one, whom I consider, as the highest medical authority in America, that blisters, in this stage of the disease, are of no kind of utility; that they seldom draw, and when they do, gangrene is the result. Unbiased by the weight of high authority, and trusting entirely to observation and experience (which I must acknowledge has been limited) I would merely say, in reply, that when the inside of the thighs, and arms, have been rubbed with a warm cloth, or some warm liquid, and the blisters applied, I have seen them in a great many cases, produce a vesicle, and

excite the small arteries to [illegible] action, when wine had ceased to produce its accustomed effect. — I have seen them employed under such circumstances, again and again, and have never yet seen a patient carried off by gangrene. —

Not less beneficial, in their effects, and somewhat analagous, in their operation to the preceding remedy, may be reckoned, frictions with stimulating substances. An infusion of Cayenne Pepper in Brandy, or Spt. Turpentine rubbed briskly on every part of the body, will in some violent cases, succeed in restoring heat, and circulation to the extreme vessels, after most other remedies have failed. There is no remedy, from which, I have occasionally derived more benefit, under such circumstances, than the Tinctura Cantharidis: it should be first employed in the form of friction, to every part of the body; after which, rags, wet with the Tinct, should be applied to the inside of the thighs, and arms; or to the side of the chest

where the frictions had been previously made.
I have one more remedy to mention, and then
I have done.
I allude to Phosphorus. During the spring of
Eighteen Hundred and nineteen, I gave to a
patient in the last stage of Typhus, who had been
given over by the attending Physician, as past
recovery, the fourth of a grain of this medicine, rubbed
up in Oil: — by introducing a Catheter in the
Esophegus, through which, it was injected into
the Stomach. The patient lay in a state of in-
ensibility, with cold extremeties, and no percepti
-ble pulse. About twenty five or thirty minutes
after the medicine had been given, the heat was meas-
urably restored to the surface; and there were a
few pulsations excited in the artery which
gave me some hopes of a recovery; but they
proved delusive: for in one hour the patient
expired, although the remedy was repeated,
together with a considerable quantity of Ether.

As I have described, such was the rise, progress, & appearance of a regular attack of this disease in the generality of cases. I have not as yet noticed any of its anomalies, which I before stated were very numerous; (there being no disease, the symptoms of which, it did not occasionally assume,) deferring them, until I came near the close of my subject. — Illustrative of the disguised form under which it sometimes appeared; I will mention the case of a Gentleman, who, while in a recumbent posture was entirely free from a symptom, indicative of disease; he had a natural pulse; his appetite was not at all impaired; and every organ appeared to exercise its functions, with the accustomed regularity. But immediately, on attempting to rise he was attacked with giddiness and fainting, and some uneasiness about the Epigastric region, which subsided on reassuming the recumbent posture. He continued in this situation for the space of four days, during which

time I saw him every day, in company with my Preceptor. At the expiration of the fourth day, the disease developed itself, and proved to be one of the most violent Fever saw, to terminate favourably. In several cases, its first appearance was in the form of Odantalgia which in some instances continued for several days. —

But by far the most common of its irregular forms were those of a Bilious and Pneumonic character. The first is the most frequent in occurrence of the two. Superadded to the usual symptoms attending a regular attack of this disease, we had those characterising the derangement of the Hepatic system, particularly the vomiting of very large quantities of bile which appeared not to be mixed with the contents of the stomach. after the first or second discharge. The disease evidently par took of the remittent form, in which circumstance, it differed from the common form, which

so far, as I could discover, wore what is called, the continued type; or if it had remissions, they were too indistinct to be observed.

The plan of treatment, which proved most successful in this case, differs from that, laid down, as best adapted to the common form of the disease, in the more frequent use of Purgative medicines, which proved as serviceable here, to a limited extent, as in other attacks of this nature; and in the administration of the bark alone; or in conjunction with the Senega Polygala which added considerably to its powers.

I deferred saying any thing of the virtues of this medicine, in the common form of the disease, until I should come to the consideration of the one just noticed, and I shall only here remark, that I never have, in any one single case, seen any benefit arise from its use, either in substance decoction or infusion alone; or in conjunction with any other remedy. On the contrary I have

sion it produces the very worst state of things, by rendering the Stomach so irritable, as not only to reject the bark, but every thing else. The administration of lime-water and milk, and the application of a blister over the Epigastric region, will often be found to restore tranquillity to the Stomach, when rendered irritable from this, or any other cause. —

Infinitely less dangerous, in its results than any of the preceding forms of Typhus, is the Pneumonic, which has been before mentioned; it occurs less frequently, than the preceding one, & usually makes its appearance, during the winter attacking for the most part, persons of a robust plethoric habit, though we sometimes see it in others of an opposite character. The usual symptoms of Pneumonic inflammation as pain in the side difficulty of breathing &c added to those which have been mentioned, as attending an incipient case of Typhus, characterises an attack of this particular form. ——

Contrary to what we usually see in Typhus, we find the pulse often small, and hard, indicating the presence of inflammatory action. Blood-letting practised with that caution and discrimination, which should invariably attend the practice of a Physician, will here display its best effects, if had recourse to, before the third or fourth day; or before the system has sunk too low to admit of its use.
A large blister applied over the side, with a few expectorants of which the Sac. Ammoniac is to be preferd generally completes the cure.
Should this plan of treatment not succeed in arresting the progress of the attack, and the patient sinks, we shall then have to resort to that course before mentiond as applicable to the general form of Typhus. It will be seen that I have not mentioned, the Sulphuric, the Muriatic, nor the Carbonic acids, Asafoetida, Castor, nor Musk among the remedies which have been found useful in this disease. I have never used any

of the acids as internal remedies, except the Sul phuric which answers exceedingly well in the convalescent state. The Castor I have never seen used, and can therefore say nothing of its utility; but I expect it will be found a feeble remedy when opposed to the Gigantic strides of Typhus.

Asafoetida would perhaps be found to answer tolerably well, if we were not in possession of more active remedies. Either from my having employed Musk, as a dernier resort, its being spurious or the inefficacy of the remedy; I have never been able (although I have given as high as sixty grains at a dose, in the low stages) in any one single case, to produce the least benefit whatever.

This Gentlemen brings to a close, what I had to say of the rise and progress of Typhus Fever, as it appeared in the south western part of the state of Kentucky, during the winters, and springs of Eighteen hundred and seventeen, and eighteen, and the spring of Eighteen hundred, and nineteen.

At what time it first commenced its ravages I never have been able exactly to learn; though I believe it was in the Autumn of Eighteen hundred and seventeen; from which time, to the present month, it has continued, except in the Summer months, to prevail. During the months of June, July, and August; it is only seen however, as an attendant on the last stages of the diseases, which occur during those months.